

## CLAIMS

What is claimed is:

- 1    1.    A memory device comprising:  
2            a main flash array; and  
3            a hidden storage area connected to the main flash array, wherein the  
4            hidden storage area can not be accessed without a valid password.
- 1    2.    The memory device of claim 1, wherein the hidden storage:  
2            area comprises one or more hidden storage memory banks.
- 1    3.    The memory device of claim 2, wherein the hidden storage memory banks  
2            are divided into one or more user spaces and a password space.
- 1    4.    The memory device of claim 3, wherein the valid password allows  
2            accesses to only one of the user spaces.
- 1    5.    The memory device of claim 2, wherein the hidden storage memory banks  
2            include a swap space to copy data between the hidden storage memory  
3            banks.
- 1    6.    The memory device of claim 2, wherein the hidden storage area further  
2            comprises a bank selector to select a hidden storage memory bank.

1 7. The memory device of claim 2, wherein the hidden storage area further  
2 comprises an output bus gate to prevent access to the hidden storage  
3 memory banks.

1 8. The memory device of claim 7, wherein the hidden storage area further  
2 comprises an address decoder to open the output bus gate when  
3 provided the valid password and a valid memory address within the  
4 hidden storage memory banks.

1 9. The memory device of claim 8, wherein the valid memory  
2 address is provided by a host.

1 10. The memory device of claim 7, wherein the hidden storage area further  
2 comprises a valid password register to indicate a password has been  
3 verified by an internal processor.

1 11. The memory device of claim 10, wherein the hidden storage area further  
2 comprises a bad password counter, to count the number of times the  
3 internal process is unable to verify the password.

- 1    12.    A method, comprising:  
2            storing one or more valid passwords in a hidden storage memory bank;  
3            writing a password from a host into the hidden storage memory bank; and  
4            verifying the validity of the written password against the valid stored  
5            passwords.
- 1    13.    The method of claim 12, further comprising permitting access to read from  
2            the hidden storage memory bank if the password is verified.
- 1    14.    The method of claim 13, further comprising permitting access to write to  
2            the hidden storage memory bank if the password is verified; and a valid  
3            address in the hidden storage memory bank is provided.
- 1    15.    The method of claim 12, further comprising dividing the hidden storage  
2            memory block into one or more user spaces, a password space, and a  
3            swap space.
- 1    16.    The method of claim 12, further comprising writing a recovery password  
2            that allows a bad password counter to be reset.

1 17. The method of claim 12, further comprising writing a system administrator  
2 password that allows the hidden storage memory bank, a recovery  
3 password, and a bad password counter to be reset.

4 18. A computer readable medium having stored thereon a plurality of  
5 instructions, said plurality of instructions when executed by a computer, cause  
6 said computer to perform:  
7 storing one or more valid passwords in a hidden storage memory bank;  
8 writing a password from a host into the hidden storage memory bank; and  
9 verifying the validity of the written password against the valid stored  
10 passwords.

1 19. The computer-readable medium of claim 18 having stored thereon  
2 additional instructions, said additional instructions when executed by a  
3 computer, cause said computer to further perform permitting access to  
4 read from the hidden storage memory bank if the password is verified.

1 20. The computer-readable medium of claim 19 having stored thereon  
2 additional instructions, said additional instructions when executed by a  
3 computer, cause said computer to further perform permitting access to

4 write to the hidden storage memory bank if the password is verified; and a  
5 valid address in the hidden storage memory bank is provided.

1 21. The computer-readable medium of claim 18 having stored thereon  
2 additional instructions, said additional instructions when executed by a  
3 computer, cause said computer to further perform dividing the hidden  
4 storage memory block into one or more user spaces, a password space,  
5 and a swap space.

1 22. The computer-readable medium of claim 18 having stored thereon  
2 additional instructions, said additional instructions when executed by a  
3 computer, cause said computer to further perform writing a recovery  
4 password that allows a bad password counter to be reset.

1 23. The computer-readable medium of claim 18 having stored thereon  
2 additional instructions, said additional instructions when executed by a  
3 computer, cause said computer to further perform writing a system  
4 administrator password that allows the hidden storage memory bank, a  
5 recovery password, and a bad password counter to be reset.